

## Directional Coupler

### ABSTRACT

A directional coupler that has a small package size and repeatable electrical characteristics. The directional coupler includes a low temperature co-fired ceramic (LTCC) substrate with several layers. Electrical components such as resistors and capacitors are integrated within the LTCC substrate. A transformer is attached to the upper surface of the LTCC substrate and is electrically connected to the resistors and capacitors. The LTCC substrate has electrically conductive vias extending therethrough. The vias are used to make electrical connections between the layers of the LTCC substrate.